Brain Health

“As far as your brain is concerned, it’s all downhill after your 20’s.” You’ve probably heard it before and it’s the type of information that makes you want to throw your hands up and go back to watching the Real Housewives of Mars, but what if that statement is not necessarily the truth. Yes, the neurons in your brain (those cells that help us to be smarter) start to deteriorate in our twenties; however, previous beliefs that there was no way to stop that process look to be incorrect. In fact, research now suggests that we can create new neurons well into our 60s and 70s and that can boost our learning, memory, reasoning and creativity.

Much of the benefit appears to come from the acquisition of new skills. Learning something new makes us smarter. That probably sounds obvious, but what you might not realize is that learning increases the white matter of your brain, which is an indication that new neurons are being created, a phenomenon called neurogenesis. The theory is that the brain has “seed cells” that have the capacity to create whole new neurons. Mainstream science had no interest in research that showed neural growth in animals unto the 1990s and many of the scientists that were publishing evidence to support this before then were ridiculed. Now there is a lot of interest in finding out how to foster this process especially in humans.

A recent study by scientists in London has shown that people can increase their intelligence by a significant amount, which also was once thought to be impossible. The reigning view was that intelligence remained stable across a person’s life, but new information suggests that the brain has the amazing capacity to change. This flexibility, termed neuroplasticity, is heavily dependent on the amount of attention a person puts into a task. This may be why learning something new has such benefits because activities that we already have mastered, we do automatically and may not pay as much attention to completing.

Now, we don’t have access to the types of “brain training” that the researchers in London do, but there are some other things that have been identified that can put our brains in a better position to change and increase our chances of getting smarter. Ongoing meditation has shown to significantly improve a person’s ability to concentrate, which can help us to focus on learning some new skill and beefing up our brain. Meditation a little too boring, then how about video games? That’s right, time to start apologizing to your children and find yourself a spot on the floor next to them. Studies have shown that strategy based video games that force you to exercise your hand eye coordination while also being forced to plan your next several moves resulted in improvements in mental agility. More specifically, people who participated showed improvements in their ability to switch between tasks more efficiently, had better short term memories and had better reasoning skills. Don’t forget to take breaks and go for a walk in between beating game levels though. As an organization that focuses on mental health, we are always championing the benefits of exercise to decrease depression, anxiety and general stress, but now there is evidence that it can help change your brain. Thirty minutes of brisk walking five days a week aids in the production of BDNF (brain-derived neurotrophic factor) which promotes the growth of neurons. But if you really want to give yourself an advantage, one of the most powerful ways to increase your brain power is to learn another language. Bilingual people consistently display much more attention and focus than those that are not bilingual because they are forced to use their brain’s executive control system. Not only does this system work toward strengthening a person’s ability to concentrate and multitask, but one scientist has shown that bilingualism can postpone the symptoms of Alzheimer’s disease by five to six years.

Whatever your interests, the benefits of learning something new are multiple. These are only a few ideas and they might not be right for you, so look around for other things. Check your local paper for groups that meet on new topics or community organizations that teach new skills. Take a yoga class or learn an instrument. There is data to suggest that working on new visual-motor skills may also simultaneously boost cognitive skills too. But whatever you decide to do, make sure it is something that you are passionate about because things that we really care about focus our attention at the highest level and that provides our brain with the biggest benefits and chance of improving.